



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Karley J. Lassley	Project Number S1718
Project Title Which Local Plant Extracts Will Be an Effective Pesticide on Mosquito Larvae and Still Be Safe for Other Aquatic Life? 2	
Abstract Objectives/Goals The purpose of my project is to determine if local plant extracts will kill mosquito larvae and still be safe for other aquatic life. My goal in doing this second year study is to find a natural pesticide that will not harm other living creatures in our environment. Methods/Materials Using pond water as a control in 10 trials for both frog eggs and mosquito larvae tests. Cut plants to blend with water to obtain a plant extract. added extract solution to 10 trials of frog eggs and 10 trials of mosquito larvae. Repeated with all three variables(hyacinth, azalea, and chrysanthemum). Checked test containers every 8 hours to determine effectiveness. Results The results show that of the variables used, Hyacinth was the only plant extract that allowed some of the frog eggs to hatch. Both Azalea and chrysanthemum extracts damaged all of the frog eggs. All three plant extracts were effective in killing the mosquito larvae. However, the hyacinth was the least effective. Conclusions/Discussion After completing my investigation I found my hypothesis for Azalea was incorrect. While all of the variables were effective in killing the mosquito larvae, only the hyacinth plant extract allowed the frog eggs to hatch. I feel that further testing needs to be done to find a more environmentally friendly pesticide that will kill mosquito larvae and not harm the aquatic life in our ponds.	
Summary Statement In my project I found that certain indigenous plant solutions are an effective method in controlling mosquito larvae yet are also compromising to the health of aquatic life.	
Help Received Parents helped pay for supplies and with photos.	